The Role of Vocational Education on the Advancement of Human Development in Indonesia

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Abstract-**Vocational education has a vital role in human development, with the preparation of the most dominant skills. The vital role of vocational education must be supported by other components, such as government policy, as well as the education component in the vocational school itself. The research is a conceptual study, which discusses the role of vocational education for human development. The results of this study revealed that the role of vocational education is: to prepare a generation that has appropriate skills in the field, preparing a generation that has good character. This research concludes that vocational education is a passion and encouragement for the generation of high skills, also has a good character, so that it can bring itself to compete in a fair.**

Keywords: vocational education, skills, character

I. INTRODUCTION

National education system Law (regulation) No. 20 of Article 3 and explanation of article 15 year 2003 mention that vocational high school (SMK) is a secondary education that prepares learners especially working in a particular field. SMK is a secondary education and formal educational path of the education system in Indonesia. As a secondary education institution and formal educational institution, SMK has the purpose of preparing students to enter the workforce and develop professional attitudes and prepare the middle level workforce to fill the needs of the business world And the World of Industry (DUDI) at this time and in the future (Suryadharma, 2012).

Vocational education is also aimed at improving the independence of individuals in entrepreneurship according to the competencies they have (Kennedy, 2011). The preparation of some competencies must be done because vocational education is a secondary education that prepares students primarily to work in a particular field (Sudira, 2012) and prepares its graduates who are able and willing to work in accordance With his field of expertise (Usman, 2016; Yahya, 2015). Vocational education is held on an institution in the form of secondary education institution, secondary post of college-controlled techniques of government or industrial society (Kuswana, 2013). Vocational education is focused on providing skilled workforce to various sectors such as Perindustiran, agriculture and technology to improve economic development (Afwan, 2013).

Vocational education is a unique kind of education because it aims to develop understanding, attitudes and work habits that are useful for the individual so as to meet the social, political, and economic needs in accordance with the features. Vocational education and training is an educational approach that emphasizes on the needs of the industry so that the enhancement and development of individuals can be done in the industry (ZAIB & Harun, 2014). Bukit (2014) explains that vocational education as a different education of other types of education should have the following characteristics: 1) oriented towards individual performance in the workplace; 2) Special justification on real needs in the field; 3) The focus of curriculum on the aspect of psychomotor, affective, and cognitive aspects; 4) The benchmark of success is not only limited in school; 5) sensitivity to the development of the workplace; 6) Require adequate facilities and infrastructures; and 7) environment supporting

Lomovtseva, Edmond and Oluiyi (2014) Explain vocational education is where a place of maturity and skill of a person can not only be charged to a group but a shared responsibility. Brown, Kirpal, & Rauner (2007) adds that vocational training and skill acquisition greatly affects the development of a person's identity related to the job.

However, the low quality of education in various types and education level, especially vocational education, is one of the factors that impede the provision of human resources (SDM) who have the skills and skills to fulfill the demands Development in various areas of expertise. The Work Employment and Social Outlook Trend 2017 predicts the number of people who are idle globally in 2018 is expected to reach 204 million in population with an additional increase of 2.7 million. Almost the same condition as the western state. Including Indonesia's open unemployment rate in February 2017 by 5.33% or 7.01 million from a total of 131.55 million people working force (Source: BPS 2017). Data BPS 2017 also shows, the unemployment of vocational high School (SMK) topped the top level of 9.27%, Senior High School (SMA) graduate of 7.03%, Diploma III (D3) of 6.35%, and the university is 4.98%.

Deal & Peterson (1999:6) stated that failure of various education quality improvement efforts is mainly due to various structural remedial efforts that are not accompanied or supported by the adequate culture change efforts of the perpetrators or practitioners themselves. SMK as an antioneness and concern for the world of education is assessed: (a) Not able to develop the potentials/potential of students optimally; (b) Not yet able to hold fun teaching and learning activities (KBM); and (c) not yet able to produce graduates who have moral integrity.

II. RESEARCH METHOD

This study used the study of literature review, with a focus on vocational education challenges in SMK. The data used in this study is secondary data. Secondary data is data obtained from research results that have been done by previous researchers. The secondary data sources in question are the primary or original scientific books and reports contained in articles or journals (printed and/or non-printing). The Data is used with themes, skills in the 21st century. Analyze data using annotated bibliography. Research procedures with article organizations from journals and books, which are relevant to the theme, synthesize findings on the articles, identify ideas that are considered important, and formulate data used as the essence of research.

III. RESULT

A. *Vocational education Principles*

Famous Vocational education principles are sixteen Prosser (Wardiman, 1998:38) theories used by many countries to develop vocational education. Based on the program structure in relation to how SMK draws its program with DUDI, Evans as quoted by Hadiwiratama (1980:60-69) divide SMK into five categories: (1) Pre-vocational guidance; (2) Preparation Program (employability preparation education); (3) General employment preparation Program (occupational area preparation education); (4) Occupational specific educational programs; and (5) Job specific education Program. The principles of vocational education known as Prosser's sixteen theoremson vocational education a basic for vocational are as follows: (1) Vocational education will be effective for the community if students are trained and confronted with the same problem or imitation (replication) of the environment in which they are will later work; (2) Vocational training can only be given effectively if the training tasks are carried out in the same way, with the same machine tools and tools as the type of work to be carried out later; (3) Vocational education will be effective if individuals are trained directly and specifically to get used to thinking and working regularly; (4) Vocational education will be effective if it helps individuals to achieve their ideals, abilities and desires at a higher level; (5) Vocational education for a type of expertise, position and skills will be effective only given to a group of individuals who feel the need, want and benefit from it; (6) Vocational education will be effective if the training experience carried out will form work habits and regular thinking so that it is a truly necessary means to improve work performance (Billet, 2009). (7) Vocational education will be effective if teachers and instructors have had successful experience in applying skills and knowledge regarding operations and work processes carried out; (8) For each type of work, individuals must have the minimum abilities so that they can defend themselves to work in these positions; (9) Vocational education must understand its position in society, market situation (environment) and train individuals to be able to meet the demands of the labor market and by creating better working conditions; (10) Fostering effective work habits for students will only occur if the training provided is in the form of real work and is not merely training; (11) Only training material that is specific to a particular type of work is a complete experience of the job; (12) For each type of work has special characteristics so that an appropriate material for certain types of work, practically does not function in other types of work; (13) Vocational education will lead to efficient services if the implementation of training is given to a group of people when they need and get success from the program; (14) Vocational education will be socially efficient, if the learning methods and personnel relationships with trainers pay attention to the characteristics of the groups served; (15) Vocational education administration will be efficient if it is implemented in a flexible, dynamic and

standardized manner; and (16) Although every effort needs to be done as economically as possible, education funding that is less than the minimum limit cannot be carried out effectively if teaching cannot reach with the minimum cost, vocational education should not be implemented.

B. The purpose of vocational education

Carr and Hartnett (2002) say —the paradigm of vocational education is economic: to contribute to the regeneration and modernization of industry and so advance the economic development and growth of modern society. Wilkins (2001) states that ationalvocational education is one of key factors in ensuring economic development, competitiveness and social stability in all countries, both developing and industrialized. according to the National Education System Law (regulation) No. 20 of 2003 article 15 states that vocational education is secondary education that prepares students primarily to work in certain fields, vocational education is education that connects, matches, trains people to have the habit of working to be able to enter and develop in the world of work (industry), so that it can be used to improve their lives.

C. Vocational education policy

One of the government's policies is the revitalization of Indonesian vocational education. Support from the government must include, 1) learning systems, 2) education units, 3) students, and 4) educators and education staff are also needed. Revitalization of the learning system includes, 1) curriculum and character education, 2) learning materials based on information and communication technology, 3) entrepreneurship, 4) alignment, and 5) evaluation. Educational units include, 1) new school units and new classrooms, 2) other learning rooms, 3) classroom rehabilitation, 4) student and teacher dormitories, 5) equipment, and 6) school management and culture. Elements of students include, 1) scholarships and 2) talent development of interest. Elements of educators and education personnel include, 1) provision, 2) distribution, 3) qualifications, 4) certification, 5) training, 6) career and welfare, and 7) appreciation and protection.

D. The role of the vocational education component

Mulyasa (2007: 24) states that competence is the ability to carry out tasks obtained through education and training. Indonesian Repubelik Law number 20 of 2005 concerning Teachers and Lecturers explains that competence is a set of knowledge, skills and behaviors that must be possessed, lived and mastered by teachers and lecturers in carrying out professional tasks. Government regulation number 19/2005

regarding national education standards article 28 paragraph 3 teacher competencies include personality competencies, pedagogical competencies, professional competencies and social competencies obtained through professional education.

According to Government Regulation No. 74 of 2008, that the education component or teacher has at least pedagogical competence, which includes pedagogical competence as referred to in paragraph (2) is the ability of the teacher in the management of learning of students which at least includes: (a) understanding insight or foundation education; (b) understanding of students; (c) curriculum or syllabus development; (d) learning design; (e) the implementation of educative and dialogical learning; (f) the use of learning technology; (g) evaluation of learning outcomes; and (h) the development of students to actualize the various potentials they have. Personality competencies as referred to in paragraph (2) at least include personalities that: believe and have piety; noble morals; wise and prudent; democratic; great; authoritative; stable; adult; honest; sportsmanship; be a role model for students and the community; objectively evaluating one's own performance; and develop themselves independently and sustainably.

Social competence as referred to in paragraph (2) is the ability of the Teacher as part of the Community which includes at least the competence to: communicate verbally, in writing, and / or gesture politely; using communication and information technology functionally; associating effectively with students, fellow educators, education personnel, leaders of educational units, parents or guardians of students; socialize politely with the surrounding community by respecting the norms and the prevailing value system; and applying the principles of true brotherhood and a spirit of togetherness, while professional competence includes; mastering the material, structure, concepts, and scientific mindset that supports the subjects being taught; mastering the competency standards and basic competencies of the subjects being taught; develop learning material that is taught creatively (Irwanto, 2019).

E. Strengthening character education in vocational schools

Strengthening character education in vocational education is more on the mental points of work. Work is a process or a period after vocational school students have finished gaining competency skills in vocational education institutions, and is declared accepted in the company or place where there is a field of work. based on the Regulation of the Minister of National Education of the Republic of Indonesia

Number 22 of 2006 concerning content standards for the Elementary and Secondary Education units, the structure of the vocational education curriculum is as follows: Vocational education aims to increase the intelligence of knowledge, personality, noble values, and the skills of students to live independently and attend further education in accordance with the vocational program.

As the aim of education number 23 of 2006 concerning the national education system is to develop the potential of students to become human beings who have faith and are devoted to God Almighty, have noble, healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens . Based on this context, character is the main form of support for every ability possessed by students, both at the time of being a student, or after graduating and already working.

Character is also called is there any basic capital in addition to skills or knowledge for humans in interacting with other humans. Character is the key to human success and sustainability. Character (soft skills) is a competence that is very important to support success in the world of work compared to hard skills (Katz, 2003).

IV. CONCLUSION

Vocational education is a place in which there is a generation of nursery processes in addition to having competence in skills, knowledge, as well as a generation that has good character. Good character is expected to be the vitals support (VS) for students after they work. The success of character, is crucial to success in work.

REFERENCES

[1] Afwan, M. (2013). Leadership on technical and vocational education in community college [Versi elektronik]. Journal of Education and Practice, 4 (21), 21-23.

[2] Billet S.2009. Changing Work, Work Practice: The Consequences for Vocational Education; in Rupert Maclean, David Wilson, Chris Chinien; International Handbook of Education for the Changing World of Work, Bridging Academic and Vocational. Learning: Germany: Springer Science+Business Media Cheng, Y.C. (2005). New Paradigm for Re-engineering Educati.

[3] Brown, A., Kirpal, S., & Rauner, F. (2007). Identitas at work. Netherlands: Springer.

[4] Cece Wijaya & Tabrani Rusyan. 2018. Kemampuandasar guru dalam proses belajar mengajar dasar guru dalam proses belajar mengajar. Bandung: PT. Remaja Rosdakarya.

[5] Cresswell, J.W. 2013. Research Design. Yogyakarta: Pustaka Pelajar. Deal, T. E & Peterson, K. D. 1999. Shaping school culture: the heart of leadership. San Francisco: Jossey-Bass Publisher.

[6] Edmon, A., & Oluiyi, A. (2014). Re-engineering technical vocational education and training toward safety practice skill needs of sawmill workers against workplace hazards in Nigeria [Versi elektronik]. Journal of Education and Practice, 5 (7), 150-157.

[7] Finch, C. R & Crunkilton. J. R. 1979. Curiculum development in vocational and technical education: planning, content, and implementation. Boston, Massachusetts: Allyn and Bacon, Inc

[8] Hermann, M., Pentek, T., & Otto, B. (2016). Design Principles for Industrie 4.0 Scenarios. Presented at the 49th Hawaiian International Conference on Systems Science

[9] Irwanto. 2019. Kompetensi Guru Vokasional SMK Di Era Revolusi Industri 4.0. Prosiding Seminar Nasional Pendidikan FKIP Universitas Sultan Ageng Tirtayasa Vol. 2, No.1, 2019, hal. 182-204

[10] Katz, J. 2003. The Chronology and Intelectual Trajectory of american Entrepreneurship Education 1876-1999. *Journal of Business Venturing.* 18. 283-300

[11] Kennedy, O.O. (2011). Philosophical and sociological overview of vocational-technical education in Nigeria [Versi elektronik]. Journal of Academic Research in Business and Social Sciences, 1, 167-175.

[12] Kuswana, W.S. (2013). Filsafat teknologi, vokasi dan kejuruan. Bandung: Alfabeta Bandung.

[13] Prosser, C.A., & Quigley, T. (1950). Vocational Education in A Democrazy. Chicago USA: American Technical Society

[14] Sudira, P. 2012. Filosofi dan teori pendidikan vokasi dan kejuruan. Yogyakarta: UNY Press.

[15] Sudira, P. 2013. Makalah Seminar Pendidikan Vokasi sebagai Disiplin Keilmuan. Fakultas Teknik. Yogyakarta: UNY

[16] Suryadharma, dkk. 2012. Tantangan Guru SMK Abad 21. Direktorat Pembinaan Pendidik dan Tenaga Kependidikan, Pendidikan Menengah. Kementerian Pendidikan dan Kebudayaan

[17] sman, H. (2016). Kepemimpinan pendidikan kejuruan. Yogyakarta: UNY Press.

[18] Wardiman Djojonegoro. 1998. Pengembangan sumber daya manusia melalui sekolah menengah kejuruan. Jakarta: Jayakarta Agung Offset

[19] Yahya, M. (2015). Analisis wawasan kejuruan mahasiswa jurusan pendidikan teknik otomotif Universitas Negeri Makassar. Journal Mekom (Media Komunikasi Pendidikan Kejuruan), 2 (1), 1-9.

[20] Zaib, Z., & Harun, H. (2014). Leadership in technical and vocational education: Toward excellence human capital [Versi elektronik]. Journal of Education and Practice, 5 (23), 132-135